

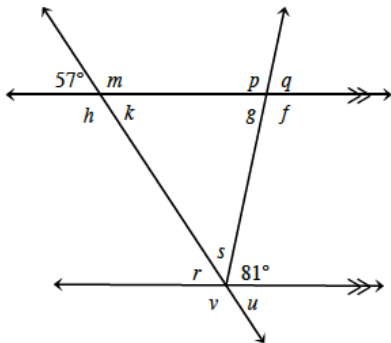
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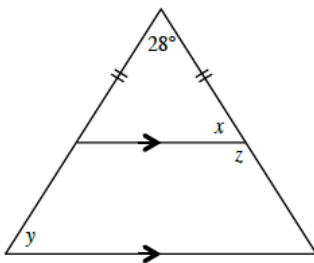
SECTION 2.1.5 HOMEWORK

DIRECTIONS: Answer each question. SHOW YOUR WORK.

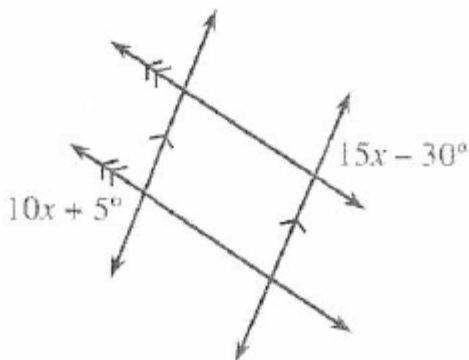
1. Use your knowledge of angle relationships to find the measure of each angle. Be prepared to explain how you found your answers (which rules did you use).



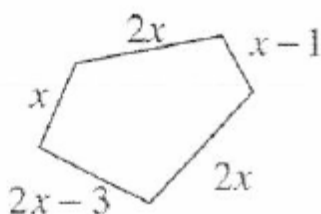
2. Use your knowledge of angle relationships to find the value of x , y , and z . Be prepared to explain how you found your answers (which rules did you use).



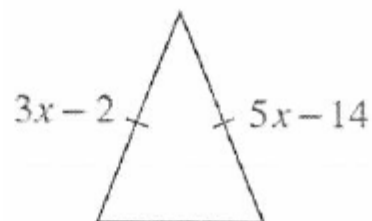
3. Solve for x . (HINT: You should move these measurements to different locations in the picture, using rules that we have about angles).



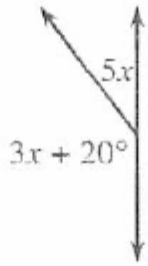
4. The perimeter of this pentagon is 76 units. Solve for x .



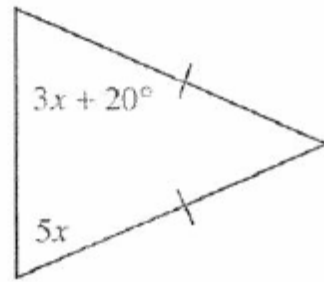
5. Solve for x .



6. Solve for x .



7. Solve for x .



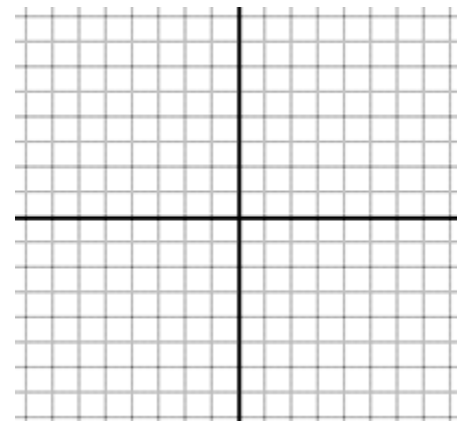
8. Solve each system of equations. (HINT: You may want to refer to the Math Notes from Lesson 2.1.3).

A. $y = 5x - 2$
 $y = 2x + 10$

B. $x = -2y - 1$
 $2x - y = -20$

9. Mario has 6 shapes in a bucket. He tells you that the probability of pulling an isosceles triangle out of the bucket is $\frac{1}{3}$. How many isosceles triangles are in the bucket?

10. A. Graph the line $y = \frac{3}{4}x$



B. If you rotate that line 90° clockwise around the origin, what will the slope of the new line be?

C. Write the equation of ANY line that is perpendicular to $y = \frac{3}{4}x$.